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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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1473	7590	06/19/2006	EXAMINER	
FISH & NEAVE IP GROUP			DENNISON, JERRY B	
ROPES & GRAY LLP			ART UNIT	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/810,410

Applicant(s)

MARCO ET AL.

Examiner

J. Bret Dennison

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-80 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/9/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to RCE for Application Number 09/810,410 received on 19 July 2005.
2. Claims 61-80 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 61, 75, 80 rejected under 35 U.S.C. 103(a) as being unpatentable over Farber et al. (U.S. Patent Number 6,185,598) and Feigenbaum (U.S. Patent Number 6,339,785).

3. Before a detailed mapping, and as discussed in the previous office actions, a short discussion about the claim interpretation should be made to clarify use of terms and also to help Applicant in clarifying Examiner's understanding of the claimed invention.

A client-to-client network involves two clients interacting with each other, in the case of the Applicant's claims, to share information. The first client requests data and the second client responds with the requested data. Because the second client is servicing the request, the functionality of the second client is the functionality of a server. Therefore, the client-to-client network includes the functionality of a client-to-

server network in each direction, depending on which computer is requesting (client) and which computer(s) are servicing that request (server). So the same functionality is repeated in both directions.

4. In context of the present invention, a client provides a request and at least two “computers that are able to service the request” respond with portions of the data that make up the complete response. Then, only a portion of the response must be provided to the client. The term client, as used in the claimed invention will be interpreted as computer, since in the context of the present invention, the term client has the functionality of both a client and a server.

Regarding claims 61, 75, and 80, Farber disclosed in a network environment, intercepting client requests at a server, known as a repeater, and the repeater responds by returning the requested resource to the client. If the repeater has a local copy of the resource then it returns that copy, otherwise it forwards the request to the origin server to get the resource, saves a local copy of the resource in order to serve subsequent requests, as well as send the resource to the requesting client (Farber, col. 3, lines 15-30). This shows the functionality of monitoring all communications on a communication channel to and from the requesting device as well as intercepting queries and response portions, and transmitting the portions to the requesting device.

Farber did not disclose the functionality of a repeater wherein the response portions are received from two or more clients, and the repeater aggregating these response portions into a response before transmitting at least a portion of the response to the client.

In an analogous art of networking, Feigenbaum disclosed wherein a client (Feigenbaum, Fig. 1, 10) of the network operates a software program which implements a query and at least two other clients of the network each provide solely a portion of a response to the query, whereby the response to the query includes a plurality of response portions from the at least two other clients (Feigenbaum, Fig. 1, 12, 14, 16). Feigenbaum disclosed the aggregation being performed at the requesting client (Feigenbaum, Fig. 1, 20).

Farber provides an accelerated method of downloading files over the network which lessens the traffic burden on the entire network (Farber, col. 1, lines 18-22), by caching responses throughout the network causing less bandwidth to be used, improving performance for distant clients.

Feigenbaum provides a more efficient way to download a file through a network by simultaneously downloading sections of the file from multiple servers, which makes downloading faster due to retrieving file portions through multiple transfer links (Feigenbaum, col. 1, lines 30-40).

It would have been obvious to move the aggregation functionality to an intermediate device, such as the repeater of Farber, to provide such functionality to other clients of the network, as well as to place less burden on the client in having to perform the aggregation itself, saving processing time at the client. [Separation of Parts see *Nerwin v. Erlichman* 168 USPQ 177 (1969)].

Therefore, it would have been obvious to incorporate the teachings of Feigenbaum into the repeater/server of Farber to provide a more efficient way of

downloading files by offloading processing of requests for portions of files to repeaters across the network to improve performance for distant clients (Feigenbaum, col. 1, lines 22-27, col. 2, lines 55-60).

5. Regarding claim 62, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said intercepting the query and the response portions is performed by a plurality of acceleration servers operatively connected to the client- to-client network, and different response portions are intercepted by each acceleration server (Farber, col. 5, lines 10-20).

6. Regarding claim 63, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein another acceleration server is a client of the client-to-client network, the method further comprising the step of: (d) relaying solely a portion of the response from said another acceleration server to said acceleration server (Feigenbaum, Fig. 1, 12).

7. Regarding claim 64, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said acceleration server is further operatively connected to a server of a client-server network whereby said intercepting reduces traffic through said server (Farber, col. 2, lines 55-60).

8. Regarding claim 65, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said intercepting the query and the response portions is performed by redirecting the query and the response portions (Farber, col. 5, lines 5-20).

9. Regarding claim 66, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 65. Farber and Feigenbaum did not explicitly state wherein said redirecting is performed by a layer 4 switch.

However, layer 4 of the OSI model is the Transport Layer, which provides transparent transfer of data between end users, thus relieving the upper layers from any concern with providing reliable and cost-effective data transfer. The transport layer controls the reliability of a given link. Some protocols are stateful and connection oriented. This means that the transport layer can keep track of the packets and retransmit those that fail. The best known example of a layer 4 protocol is TCP.

Farber disclosed the repeater detecting failure through TCP/IP (Farber, col. 21, lines 30-35). Farber also disclosed that the functionality of the reflector/repeater includes redirecting client requests (Farber, col. 3, lines 15-35).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention that the functionality of the reflector/repeater includes redirecting client requests using layer 4 switching, since the TCP protocol is used.

10. Regarding claim 67, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said acceleration server has a location that is one of either: in a local area network, in a server at a cable television provider junction, at a satellite relay link, or within an ADSL junction (Farber, col. 16, lines 1-10).

11. Regarding claim 68, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including wherein said query includes a request for data and the response includes said data (Farber, col. 3, lines 15-25).

12. Regarding claim 69, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 68, including wherein said data is in a format selected from the group of file types consisting of M133, Dvid, MPEG-Z, MPEG-I, M-JPEG, MPEGJ, ActiveMovie/Video for Windows (.avi), QuickTime (.mov), Realvideo(.rm and .rnm), H263.1, HTML, Flash, Gif Tif mpeguide and exe (Farber, col. 4, lines 50-65).

13. Regarding claims 70 and 71, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including the step of prior to said transmitting:

- (d) analyzing the response portions based on at least one variable; and
- (e) storing the response portions based on said at least one variable

wherein said variable is selected from the group consisting of temporal information, ordinal information, frequency information, client information and identification information. (Farber, col. 4, lines 29-38, Farber disclosed storing the response portions based on client requests).

14. Regarding claim 68, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including the step of prior to said transmitting:

(d) analyzing a direction of the response portions in accordance with a cache policy, wherein said cache policy is selectably either unidirectional or bidirectional (Farber, col. 5, lines 20-26).

15. Regarding claims 73 and 74, Farber and Feigenbaum disclosed the limitations, substantially as claimed, as described in claim 61, including (d) checking availability of at least one other client of the at least two other clients prior to said intercepting said response portion from said at least one other said client and further includes checking availability of requested data stored on said at least one other client (Farber, col. 8, lines 30-35).

16. Claims 76-79 include limitations substantially similar to claims 61-75, and 80 and are therefore rejected under the same prior art as being substantially similar.

Response to Amendment

Applicant's arguments and amendments filed on 3/9/2006 have been carefully considered but they are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the following new grounds of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., *by incorporating new limitations into the independent claims, which will require further search and consideration*) to the claims which significantly affected the scope thereof.

Applicant's arguments with respect to claims 61-80 have been fully considered but they are not persuasive. Applicant's arguments include the failure of previously applied art to expressly disclose the teachings of "caching or acceleration" [see Applicant's Response, page 23, ¶15].

Examiner respectfully disagrees.

The method of acceleration is not limited to a cache. As shown above, Feigenbaum provides a more efficient way to download a file through a network by simultaneously downloading sections of the file from multiple servers, which makes downloading faster due to retrieving file portions through multiple transfer links (Feigenbaum, col. 1, lines 30-40). Therefore, Feigenbaum does teach acceleration.

Applicant's arguments also include that "the repeaters only handle requests addressed to the one particular server that they repeat or mirror. Thus they do not need to, nor do they monitor all traffic to and from a client, nor do they need to identify peer-

to-peer communications for interception from among all traffic" [see Applicant's Response, page 24, ¶2].

Examiner respectfully disagrees.

As explained in the above rejection, Farber disclosed intercepting client requests at a server, known as a repeater, and the repeater responds by returning the requested resource to the client. If the repeater has a local copy of the resource then it returns that copy, otherwise it forwards the request to the origin server to get the resource, the origin server responds to the repeater, providing the resource, and the repeater saves a local copy of the resource in order to serve subsequent requests, as well as send the resource to the requesting client (Farber, col. 3, lines 15-30). This shows the functionality of monitoring all communications on a communication channel to and from the requesting device as well as intercepting queries and response portions, and transmitting the portions to the requesting device.

Thus, Applicant's arguments drawn toward distinction of the claimed invention and the prior art teachings on this point are not considered persuasive. It is also clear to the Examiner that Feigenbaum and Farber clearly teach the independent claims of the Applicant's claimed invention.

Applicant's arguments with respect to claims 61-80 are deemed moot in view of the following new grounds of rejection, necessitated by Applicant's amendment to the claims, which significantly affected the scope thereof.

Furthermore, as it is Applicant's right to continue to claim as broadly as possible their invention, it is also the Examiner's right to continue to interpret the claim language as broadly as possible. It is the Examiner's position that the detailed functionality that allows for Applicant's invention to overcome the prior art used in the rejection, fails to differentiate in detail how these features are unique. As it is extremely well known in the networking art as already shown by Feigenbaum and Farber as well as other prior arts of records disclosed acceleration receipt of data is taught as well as other claimed features of Applicant's invention. By the rejection above, the applicant must submit amendments to the claims in order to distinguish over the prior art use in the rejection that discloses different features of Applicant's claimed invention.

It is the Examiner's position that Applicant has not yet submitted claims drawn to limitations, which define the operation and apparatus of Applicant's disclosed invention in manner, which distinguishes over the prior art.

Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response and reiterates the need for the Applicant to more clearly and distinctly define the claimed invention.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are

applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.


THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Bret Dennison whose telephone number is (571) 272-3910. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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